



HANSON PROFESSIONAL SERVICES INC.

815 Commerce Drive, Suite 200  
Oak Brook, Illinois 60053  
Telephone: 630.990.3800  
Fax: 630.990.3801

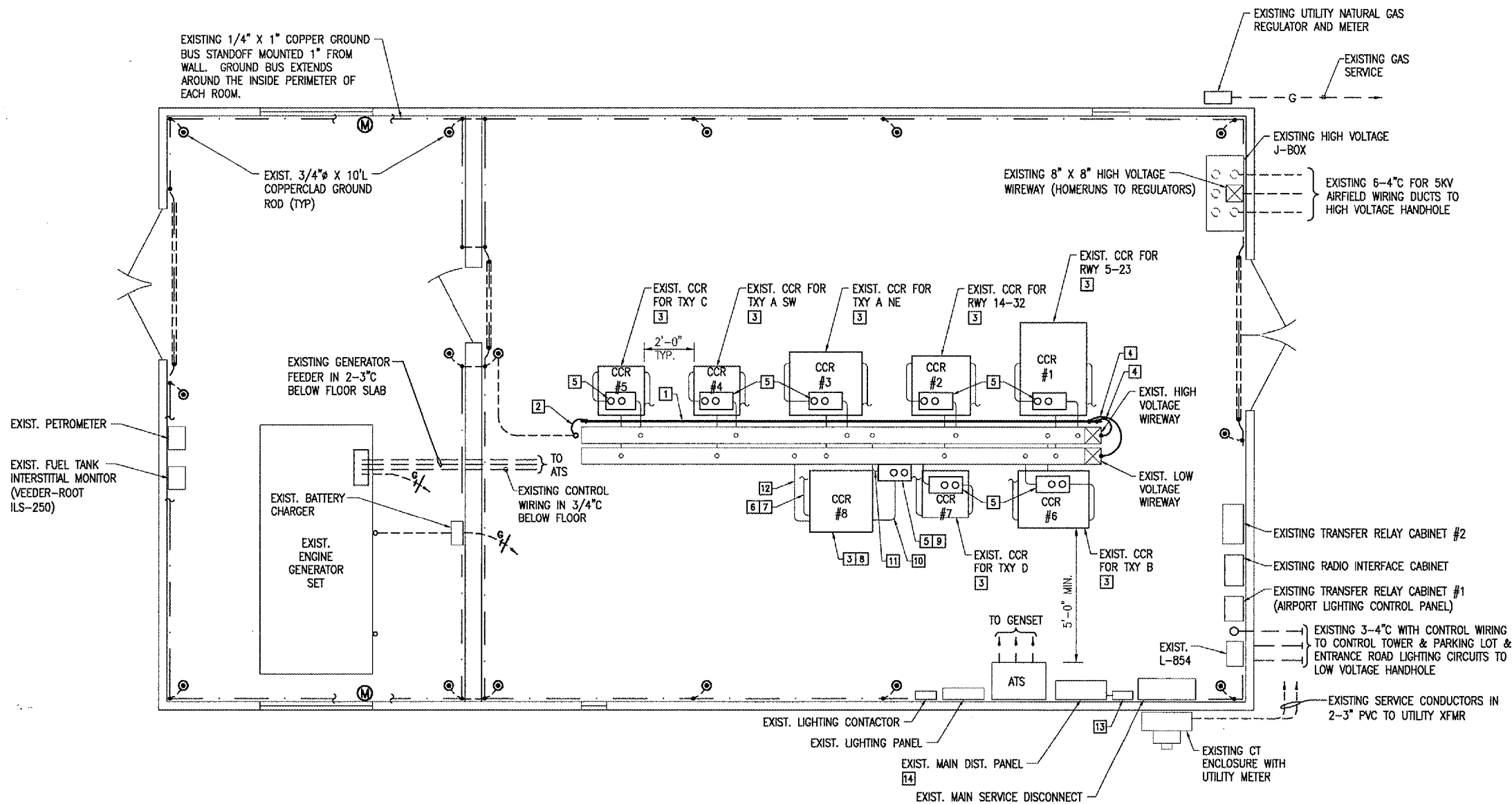


WAUKEGAN REGIONAL AIRPORT  
WAUKEGAN PORT DISTRICT

3580 North McAre Road  
Waukegan, Illinois 60087  
Telephone: 847.244.0066  
Fax: 847.244.3813

AIRFIELD SIGNAGE IMPROVEMENTS

AIP PROJECT NO. 3-17-0105-B35  
IDA PROJECT NO. UGN-3650



**ELECTRICAL VAULT FLOOR PLAN**  
SCALE 3/8"=1'-0"  
2 0 2 4 FEET

**NOTES**

- ALL VAULT WORK AND/OR POWER OUTAGES SHALL BE COORDINATED WITH THE AIRPORT MANAGER.
- ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA70 (NEC MOST CURRENT ISSUE IN FORCE), THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE UL LISTING, ETL LISTING, OR OTHER THIRD PARTY LISTING AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
- SEE "CCR GROUND BUS RISER AND GROUNDING DETAILS" SHEET FOR ADDITIONAL INFO ON THE NEW GROUND BAR FOR CCR'S.
- SEE HIGH VOLTAGE WIRING SCHEMATICS FOR REQUIREMENTS ON CUTOUT WIRING.
- SEE "PROPOSED ELECTRICAL ONE LINE" FOR REQUIREMENTS ON BRANCH CIRCUIT WIRING, CONDUIT, EQUIPMENT, ETC.
- HIGH VOLTAGE & LOW VOLTAGE CIRCUITS SHALL NOT BE INSTALLED IN THE SAME RACEWAY.
- LIQUID TIGHT FLEXIBLE METAL CONDUIT AND ASSOCIATED FITTINGS SHALL BE UL LISTED TO MEET THE REQUIREMENTS OF NEC 350.6, SUITABLE FOR GROUNDING AND SUNLIGHT RESISTANT. LIQUID TIGHT FLEXIBLE METAL CONDUIT THAT IS USED FOR FLEXIBILITY (INCLUDING CONNECTIONS TO CCR'S & TRANSFORMERS) SHALL REQUIRE AN EXTERNAL BONDING JUMPER OR INTERNAL EQUIPMENT GROUNDING CONDUCTOR PER NEC 350.60. EXTERNAL BONDING JUMPERS USED WITH CCR INSTALLATIONS SHALL BE #6 AWG COPPER (MINIMUM). DO NOT INSTALL LIQUID TIGHT FLEXIBLE METAL CONDUIT THAT IS NOT UL LISTED.

**KEYED NOTES**

- NEW GROUND BAR FOR CCR'S; 1/4" THICK BY 2" WIDE BY 20'-1" LONG COPPER BUS BAR WITH STANDOFF INSULATORS AND MOUNTING HARDWARE. NEW GROUND BAR SHALL REPLACE EXISTING 1/4" THICK BY 1" WIDE GROUND BAR AT CCR'S. MOUNT TO EXISTING STRUT SUPPORT STRUCTURE. SEE NOTE 3.
- CONNECT EXISTING #1/0 GROUNDING ELECTRODE CONDUCTOR TO NEW GROUND BAR.
- BOND EACH CCR FRAME TO NEW GROUND BAR WITH #6 AWG (MIN.) STRANDED COPPER CONDUCTOR. SEE NOTE 3.
- BOND HIGH VOLTAGE & LOW VOLTAGE WIREWAYS TO NEW GROUND BAR WITH #6 AWG (MIN.) STRANDED COPPER CONDUCTOR. SEE NOTES 3 & 4.
- BOND EACH CUTOUT ENCLOSURE TO NEW GROUND BAR WITH #6 AWG (MIN.) STRANDED COPPER CONDUCTOR. SEE NOTES 3 & 4.
- FURNISH & INSTALL NEW PLUG-IN UNIT CIRCUIT BREAKER FOR NEW CCR #8, 240 VAC BRANCH CIRCUIT. SEE NOTE 5.
- NEW 240 VAC BRANCH CIRCUIT CONDUCTORS & CONDUIT TO TAXI GUIDANCE SIGN CCR. SEE NOTE 5.
- NEW TAXI GUIDANCE SIGNS CCR.
- SERIES PLUG CUTOUT CABINET WITH L-861 LIGHT FIXTURES. SEE DETAIL ON "HIGH VOLTAGE SCHEMATIC FOR TAXIWAY SIGNS" SHEET. PROVIDE ADEQUATE WORKING SPACE IN FRONT OF CUTOUT ENCLOSURE TO MEET NEC CLEARANCE REQUIREMENTS.
- 2 #8 FAA L-828 TYPE C, 5000V CABLES WITH #8 EQUIPT GND IN 1" LTFMC FROM CCR TO CUTOUT ENCLOSURE.
- 2 #8 FAA L-828 TYPE C, 5000V CABLES IN 1" LTFMC FROM CUTOUT ENCLOSURE TO HIGH VOLTAGE WIREWAY & ON TO TAXI GUIDANCE SIGN SERIES CIRCUIT.
- CONTROL WIRING IN 3/4" LTFMC FROM CCR TO LOW VOLTAGE WIREWAY. INTERFACE TO EXISTING CONTROL SYSTEM WITH UPGRADES AS DETAILED HEREIN.
- NEW AC SURGE PROTECTOR/TVSS DEVICE. INSTALL ON LEFT HAND SIDE OF POWER DISTRIBUTION PANELBOARD ABOVE SERVICE DISCONNECT. PROVIDE 2" GRSC NIPPLE WITH 3 #6 THWN, 1 #6 NEUTRAL, 1 #6 GND, 1 #8 EQUIPT GND. REMOVE EXISTING TVSS UPON COMPLETING INSTALLATION OF NEW TVSS.
- FURNISH & INSTALL NEW BREAKER FOR CCR BUSWAY & NEW BREAKER FOR AC SURGE PROTECTOR/TVSS DEVICE. SEE NOTE 5.

No.	Drawing Issue Description	Date	By

Date  
NOVEMBER 10, 2006  
Sheet Title

**ELECTRICAL VAULT FLOOR PLAN**

831-06A8004  
Project Number  
KNL 09/01/06  
Layout By Date  
KNL 09/01/06  
Designed By Date  
RMH 11/10/06  
Reviewed By Date  
MV  
Drawn By Sheet No.